Commonwealth of Kentucky
Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

Completed by: Sajjad Quabili

GENERAL INFORMATION:

Name:	Roll Coater, Inc.
Address:	2604 River Road Hawesville, KY 42348
Date application received:	5/12/2003
SIC Code/SIC description:	3479, Coating, Engraving, and Allied Services, NEC
Source ID:	21-091-00020
Source A.I. #:	1619
Activity ID:	APE20040003
Permit:	V-07-004

APPLICATION TYPE/PERMIT ACTIVITY:

[ ] Initial issuance	[ ] General permit
[ ] Permit modification	[ ] Conditional major
__Administrative	[x] Title V
__Minor	[x] Synthetic minor
__Significant	[x] Operating
[x] Permit renewal	[ ] Construction/operating

COMPLIANCE SUMMARY:

[ ] Source is out of compliance [ ] Compliance schedule included

[x] Compliance certification signed

APPLICABLE REQUIREMENTS LIST:

[ ] NSR	[x] NSPS	[ ] SIP
[ ] PSD	[x] NESHAPS	[ ] Other
[ ] Netted out of PSD/NSR	[ ] Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

[ ] Acid rain source

[ ] Source subject to 112(r)

[x] Source applied for federally enforceable emissions cap

[ ] Source provided terms for alternative operating scenarios

[x] Source subject to a MACT standard

[ ] Source requested case-by-case 112(g) or (j) determination

[ ] Application proposes new control technology

[x] Certified by responsible official

[x] Diagrams or drawings included

[ ] Confidential business information (CBI) submitted in application

[ ] Pollution Prevention Measures

[ ] Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM_{10}	1.412	8.25
SO_2	0.08	0.36
NOx	24.346	84.34
CO	6.086	21.08
VOC	NA	225*
Single HAPs		
Formaldehyde	NA	10.77
Isophorn	NA	42.33
Naphthalene	NA	26.65
Toluene	NA	28.96
Xylene	NA	121.87
Ethylbenzene	NA	55.7
Glycol ether	NA	53.68

* Synthetic minor limit for VOC emissions: 225 tons per year

SOURCE DESCRIPTION:

Roll Coater operates a metal coil manufacturing plant at Hawesville. The coil coating operation includes prime coating, finish coating and drying ovens. Permanent Total Enclosure (PTE) combined with a thermal oxidizer is utilized to capture and control the VOC/HAP emissions released from the roll coating process.

COMMENTS:

Roll Coater applied for a renewal of their Title V permit (V-98-022). The source is major for VOC and HAP emissions.

VOC emissions:

Roll Coater is subject to 40 CFR 60 Subpart TT for VOC emissions. The Subpart allows the source emission of 10 percent of the VOC's applied for each calendar month for each affected facility that continuously uses a thermal oxidizer for VOC emission reduction. Based on this allowable, the source's potential to emit of VOC is 1494 tons per year. To preclude the applicability of 401 KAR 51:017 Prevention of Significant Deterioration (PSD), the source has accepted a voluntarily emission cap for VOC emissions of no greater than 225 tons per rolling 12 month period.

HAP emissions:

Roll Coater is subject to 40 CFR 63 Subpart SSSS, National Emission Standard for Hazardous Air Pollutants for the surface coating of metal coil. The source utilizes a thermal oxidizer and permanent total enclosures to comply with the emission standard for HAP emission. Alternating compliance method to meet the emission standard by either by compliant coatings option or as applied compliant option is provided in the Section H of the permit.

APPLICABLE REGULATIONS:

A. 401 KAR 60:005, Section 3(1)(xx), which incorporates 40 CFR 60 Subpart TT, Standards of performance for metal coil surface coating, is applicable to facilities commencing construction, modification, or reconstruction after January 5, 1981.

Emission standards for VOCs (Subpart TT):

Each owner or operator subject to this subpart shall not cause to be discharged into the atmosphere more than:

(1) 0.14 kg VOC/*l* of coating solids applied for each calendar month for each affected facility that continuously uses an emission control device(s) operated at the most recently demonstrated overall efficiency; or

(2) 10 percent of the VOC's applied for each calendar month (90 percent emission reduction) for each affected facility that continuously uses an emission control device(s) operated at the most recently demonstrated overall efficiency; or

(3) A value between 0.14 (or a 90-percent emission reduction) and 0.28 kg VOC/*l* of coating solids applied for each calendar month for each affected facility that intermittently uses an emission control device operated at the most recently demonstrated overall efficiency.

B. Regulation 401 KAR 59:015, New indirect heat exchangers is applicable to emission point #8 (Boiler #1 and Boiler #2).

C. 40 CFR 63 Subpart SSSS, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil. The provisions of this subpart apply to each facility that is a major source of HAP, at which a coil coating line is operated. A coil coating line includes a web unwind or feed section, a series of one or more work stations, any associated curing oven, wet section, and quench station. A coil coating line does not include ancillary operations such as mixing/thinning, cleaning, wastewater treatment, and storage of coating material. Roll Coater is an existing affected source because the construction of the source commenced before July 18, 2000.

Emission standards for HAPs:

Each coil coating affected source must limit organic HAP emissions to the level specified in paragraphs 1 or 2.

(1) No more than 2 percent of the organic HAP applied for each month during each 12 month compliance period (98 percent reduction).

Compliance demonstration method:

Use of a capture system and a thermal oxidizer to demonstrate overall organic HAP control efficiency is at least 98 percent on a monthly basis for individual or groups of coil coating lines.

Or

(2) No more than 0.046 kilogram (kg) of organic HAP per liter of solids applied during each 12-month compliance period.

Compliance demonstration method:

a. Use of a combination of compliant coatings and thermal oxidizer while maintaining the average equivalent emission rate below 0.046 kg HAP per liter solids on a rolling 12-month average as applied basis, determined monthly.

Or

b. Use of either "as purchased" compliant coatings or "as applied" compliant coating method:

i. *By using "as purchased" compliant coatings*: Each coating material used during the 12-month compliance period does not exceed 0.046 kg HAP per liter solids, as purchased.

ii. *By using "as applied" compliant coatings:*

(a) Each coating material used does not exceed 0.046 kg HAP per liter solids on a rolling 12-month average as applied basis, determined monthly.

Or

(b) Average of all coating materials used does not exceed 0.046 kg HAP per liter solids on a rolling 12-month average as applied basis, determined monthly.

PERFORMANCE TEST:

Roll Coater is utilizing a thermal oxidizer to control HAP emissions. The source completed a performance test of its coil coating operations capture system and thermal oxidizer during the week of August 18, 2003. EPA Methods 1, 2, 4, 25A and 204 were utilized in the performance test. The test results met the requirements of VOC emissions.

The Division received a waiver request from Roll Coater for performing a compliance test under Subpart SSSS. The Division agreed with the source that August 2003 test fulfilled the performance testing requirements under Subpart SSSS. DRE and capture efficiency test results can be utilized for the calculation of compliance demonstration method for HAP emissions under Subpart SSSS.

The next compliance test shall be performed no later than 5 years from the date of last test (August 19, 2003).

EMISSION CAP:

Potentially Roll Coater is a PSD source for VOC emissions. The source has voluntarily accepted an emission cap of 225 tons per rolling 12-month period to preclude the applicability of 401 KAR 51:017 Prevention of significant deterioration of air quality.

MONITORING:

The Division is requiring Roll Coater Inc. to keep daily records of usage of coatings and thinners at the metal coil coating line and to summarize those records at the end of each month. The source shall also keep records of the monthly and twelve months rolling total for VOC and HAP emissions at the plant.

Capture system monitoring. The permittee shall maintain a capture system monitoring plan that identifies the operating parameter to be monitored and conduct monitoring according to the plan. The operating parameter for the capture system in this facility is the pressure drop across the enclosure.

Temperature monitoring of thermal oxidizers. The permittee shall monitor the operating parameter established in accordance to §63.5150(a) to ensure that destruction or removal efficiency is maintained.